UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K/A

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 20, 2024

FibroBiologics, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation) 001-41934 (Commission File Number) 86-3329066 (IRS Employer Identification No.)

455 E. Medical Center Blvd, Suite 300 Houston, Texas (Address of Principal Executive Offices)

77598 (Zip Code)

Registrant's Telephone Number, Including Area Code: 281 671-5150

Not Applicable (Former Name or Former Address, if Changed Since Last Report)

Che	eck the appropriate box below if the Form 8-K filing is intended	ed to simultaneously satisfy the fili	ing obligation of the registrant under any of the following provisions:
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)		
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)		
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))		
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))		
	Securit	ies registered pursuant to Section	n 12(b) of the Act:
		Trading	
	Title of each class	Symbol(s)	Name of each exchange on which registered
	Common Stock, \$0.00001 par value	FBLG	The Nasdaq Stock Market LLC
	icate by check mark whether the registrant is an emerging gro Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter)		05 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of
Em	erging growth company 🗵		
	n emerging growth company, indicate by check mark if the recounting standards provided pursuant to Section 13(a) of the Ex	_	extended transition period for complying with any new or revised financial

Explanatory Note

As previously disclosed, on December 20, 2024, FibroBiologics, Inc. (the "Company") entered into a Standby Equity Purchase Agreement (the "SEPA") with YA II PN, Ltd., a Cayman Islands exempt limited company (the "Investor").

Pursuant to the SEPA, the Investor was to advance to the Company, subject to the satisfaction of certain conditions as set forth therein, the principal amount of \$15 million, which were to be evidenced by convertible promissory notes (the "Promissory Notes") in three tranches.

This Amendment No. 1 to the Current Report on Form 8-K (this "Amendment") is being filed by the Company for the purpose of amending and supplementing Item 3.02 of that certain Current Report on Form 8-K originally filed by the Company with the U.S. Securities and Exchange Commission on December 23, 2024 (the "Original Form 8-K"). This Amendment is being filed to provide the total number of shares of the Company's common stock that may be issued upon conversion of the Promissory Notes. This Amendment does not amend any other item of the Original Form 8-K and all other information previously reported in or filed with the Original Form 8-K (including the other information in Item 3.02) is hereby incorporated by reference into this Amendment.

Item 3.02 Unregistered Sales of Equity Securities.

The information set forth in Item 3.02 of the Original Form 8-K is hereby supplemented as follows:

The maximum number of shares of common stock of the Company that may be issued through the conversion of the \$15.0 million aggregate principal amount of the Promissory Notes is 36,945,812 shares, assuming a conversion price of \$0.406 per share, subject to anti-dilution adjustments. The maximum number of shares of common stock of the Company that may be issued through the Commitment Amount is 4,424,778 shares, assuming a purchase price of \$2.26, subject to certain limitations and conditions set forth in the SEPA.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

FibroBiologics, Inc.

Date: July 18, 2025 By: /s/Pete O'Heeron

Name: Pete O'Heeron

Title: Chief Executive Officer